

NOTEWORTHY COLLECTIONS

COCHLEARIA OFFICINALIS L. (BRASSICACEAE).—USA, CA, Del Norte Co., Crescent City, 0.1 hectare basaltic sea stack, 1 km offshore from the intersection of Pebble Beach Dr. and Pacific Ave., 20 Jun 1980, *Lester 4829* (HSC). Scattered plants on ne. slope, in crevices of rock in accumulated guano, spread over a 4 × 10-m area. Associated with *Lasthenia minor* subsp. *maritima*.

Previous knowledge. Holarctic, known in Pac. Northw. from AK, B.C., WA, and OR coasts. Alaskan populations are commonly associated with seabird colonies. (Herbaria consulted: CAS, HSC, JEPS and UC (fide Alice Howard), OSC (fide Kenton Chambers), RSA (fide Robert Thorne), and WS (fide Joy Mastrogriuseppe); published sources: Munz, A Calif. fl. 1959; Munz, Suppl. Calif. fl. 1968; Hitchcock et al., Vasc. pls. Pacific Northw. 2. 1964.)

Significance. First record for CA, a 55-km range extension from Cape Sebastian, OR. Locality was breeding ground for Western Gulls, Black Oystercatchers, and Pigeon Guillemots at time of collection. Should be sought on other northcoast offshore rocks that are frequented by seabirds.—GARY S. LESTER, U.S. Fish and Wildlife Service, 791 8th Street, Arcata, CA 95521, MICHAEL C. VASEY, Department of Biology, San Francisco State University, San Francisco, CA 94132, and WILLIAM E. RODSTROM, P.O. Box 4286, Arcata, CA 95521. (Received and accepted 16 Oct 1980.)

PEDICULARIS CRENULATA Benth, f. *CANDIDA* Macbr. (SCROPHULARIACEAE).—USA, CA, Mono Co., Sierra Nevada Aquatic Research Laboratory along n. side of Convict Cr., 1.5 km w. of hwy 395 (T4S R28E S12 se. ¼), 2160 m: 9 Aug 1978, *Howald 952*; 12 Aug 1978, *Orr 337* (UCSB). A small colony (130 plants counted 30 Aug 1980) in moist meadow soil with *Mimulus primuloides*, *Agoseris glauca*, *Penstemon oreocharis*, *Cirsium congdonii* (*C. drummondii*), *Stellaria longipes*, *Trifolium longipes*, *Gentiana holopetala*, *Parnassia palustris* and *Juncus macrandrus*. Plants were mainly in fruit during the 1980 census.

Previous knowledge. Species known from Mono Co. e. to s. WY and CO; the form always rare but scattered throughout range of species. (Herbaria consulted: UC and JEPS kindly checked by Alice Q. Howard, UCSB; published sources: Major and Bamberg, Madroño 17:93–109. 1963; Abrams, Illus. fl. Pac. States. 3. 1951; Munz, A Calif. fl. 1959; MacBride, Contr. Gray Herb. 56:61. 1918; Sprague, Aliso 5:181–209. 1962.)

Significance. Only collections of the sole CA population since 30 Jul 1933 (*Peirson s.n.*, UC). Listed as “presumed extinct” in CA (Smith et al., Inv. rare endang. vasc. pls. Calif. CNPS Spec. Publ. 1, ed. 2. 1980). 400 km w. of the nearest population (Duck Creek, Schell Creek Range, NV). All individuals observed in 1978, 1979, and 1980 had white corollas (f. *candida*), although the typical corolla color is purple. Sprague noted in 1962 (but did not collect) a population of 25–30 white-flowered plants in the same area. The population lies completely within the fenced boundaries of the Sierra Nevada Aquatic Research Laboratory, a unit of the Univ. of Calif. Natural Land and Water Reserves System, and may be the only suitable habitat in the area currently protected from cattle grazing.—ANN M. HOWALD, 419 Ellwood Beach Drive, Apt. 5, Goleta, CA 93117 and BRUCE K. ORR, Department of Biological Sciences, University of California, Santa Barbara 93106. (Received 29 Aug 1980; accepted 3 Sep 1980; final version received 24 Oct 1980.)

DEDECKERIA EUREKENSIS Reveal & Howell (POLYGONACEAE).—USA, CA, Inyo Co., White Mts., 2.4 km ne. of E. Line St., Bishop, between Silver Canyon and Poleta

Canyon (T6S R33E S6 nw.¼ nw.¼), 1460 m, 24 Jun 1980, *Strohm 560* (UC and private collection). Extremely local on a dry gravelly n.-facing slope in Shadscale Scrub. Associated species include *Encelia virginensis* subsp. *actonii*, *Dalea fremontii*, *Atriplex confertifolia*, and *Petalonyx nitidus*. Verified by Mary DeDecker.

Previous knowledge. Known from the Last Chance Mts. and the Inyo Mts. of Inyo Co., CA. (M. DeDecker, pers. comm., 1980; Reveal and Howell, *Brittonia* 28:245–251. 1976).

Significance. First record for the w. side of White-Inyo range and n.-most location, a disjunction of 72 km. Most of the plants were growing on the slope; however, some were found in the wash. Considered “rare and not endangered” (Smith et al., *Inv. rare endang. vasc. pls. Calif.*, CNPS Spec. Publ. 1, ed. 2. 1980).—PATTI J. NOVAK and KATHRYN L. STROHM, Inyo National Forest, Bishop, CA 93514. (Received 18 Aug 1980; accepted 9 Sep 1980.)

IPOMOEA EGREGIA House (CONVOLVULACEAE).—USA, NM, Grant Co., ca. 11 km nw. of Silver City: T17S R15W center of line between S10 and S11, 2000 m, 6 Sep 1980, *Spellenberg et al. 5864* (NMC). In a wnw.-draining canyon, pinyon-juniper zone, growing on pale, rather barren bedrock outcrop. Very local, ca. 50 plants. Associates included the closely related *I. plummerae* (5863), the rather similar, but annual, *I. costellata*, and the more distantly related *I. hirsutula* among other annuals and hemi-cryptogams; T17S R15W S11 w-c.¼, 2000+ m, 10 Sep 1980, *Fletcher 4907* (US For. Serv., Albuquerque), 3 plants.

Previous knowledge. Three collections from se. AZ (two in the Huachuca Mts., sw. Cochise Co., the type locality, and one in the Santa Rita Mts., se. Pima Co.), and a fourth from Peru (cited in Macbride, *Publ. Field Mus. Nat. Hist.* 288. 1931). (Herbaria consulted: ARIZ, ASC, MO, NMC, UNM, Western NM Univ.; published sources: House, *Torreya* 6:124. 1906; Wootton and Standley, *Fl. New Mex. Contr. U.S. Natl. Herb.* 19. 1915; Macbride, *op. cit.*; Kearney and Peebles, *Ariz. fl.* 1951; Martin and Castetter, *Checklist gymnosperm. angiosperm. New Mex.* 1970.

Significance. First record from NM, a ne. range extension of 225 km. Our collection provides further evidence that *I. egregia* is a variant of *I. plummerae*, as first indicated by Macbride, who proposed the former be called *I. plummerae* var. *cuneifolia*. The two taxa are morphologically similar except in leaf form. *I. plummerae*, widespread in AZ, extends to sw. NM and Sonora (Kearney & Peebles, *op. cit.*; McDougal, *Seed pls. N. Ariz.* 1973), and Peru (Macbride, *op. cit.*). At all stations known for *I. egregia*, including the disjunct Peruvian site, *I. plummerae* also occurs, but the converse does not hold. *Spellenberg et al. 5863* has six specimens intact with tubers; some of these are *I. plummerae*, others are *I. capillacea* G. Don (*I. muricata* Cav.) as delimited in Kearney and Peebles (*op. cit.*). *I. capillacea* is said to have elongate tubers, sepals, 5–6 mm long, and the length of the peduncle + pedicel about equal to that of the calyx. *I. plummerae* has globose tubers, sepals 7–9 mm long, and the length of the peduncle + pedicel up to twice the length of the calyx. In 5863 the tubers range from elongate (1.5:1, length:width) to globose (1:1), the sepals range from 6–10 mm in length, and the ratio peduncle + pedicel/calyx ranges from 1:1–1.76:1 (within-plant averages). In addition, in our equally small sample of *I. egregia*, the five tubers ranged from nearly globose to elongate (2.5:1). George Yatskievych, who is working on the *I. egregia*-*I. plummerae* problem at ARIZ, was most helpful in researching AZ locations for this note and providing comments. Warren L. Wagner assisted us at MO.

STELLARIA NITENS Nutt. (CARYOPHYLLACEAE).—Same location and date as above, *Spellenberg et al. 5869* (NMC, NY). Frequency not recorded, but collection comprises

21 individuals from ca. 0.5 m². Associates included *Drymaria fendleri*, *D. sperguloides*, *Bidens leptcephala*, *Bulbostylis funckii*, *Euphorbia bilobata*, and *Tagetes micrantha*.

Previous knowledge. B. C. s. to Baja Calif., e. to MT, s. through UT to c. and se. AZ. (Herbaria consulted: ARIZ, ASC, MO, NMC, UNM, Western NM Univ.; published sources; Hitchcock et al., Vasc. pls. Pacific Northw. 2. 1964; Kearney and Peebles, op. cit.; Martin and Castetter, op. cit.).

Significance. First record for NM, a ne. range extension of 110 km from the Chiricahua Mts. of AZ. This inconspicuous plant probably occurs elsewhere in NM.—ROB J. SORENG AND RICHARD SPELLENBERG, Biology Department, New Mexico State University, Las Cruces 88003. (Received and accepted 13 Nov 1980; final version received 3 Dec 1980.)

ERIGERON HUMILIS Graham (ASTERACEAE).—USA, ID: Lemhi Co., Lemhi Range, Challis N.F., moist alpine tundra on n. slope Bell Mt., 35° nw. slope on quartzite, 3400 m, 2 Aug 1978, *Henderson et al.* 4880 (ID, NY); Custer Co., Lost River Range, Challis N.F., moist alpine tundra on n. slope Leatherman Pass, on limestone, 3300 m, 27 Jul 1979, *Brunsfeld and Brunsfeld* 1235 (ID); Butte Co., s. Lost River Range, Challis N.F., moist alpine tundra at head of Elbow Canyon on limestone, 3250 m, 30 Jul 1979, *Brunsfeld and Brunsfeld* 1260 (ID). Three additional stations in the Lost River Range have been discovered by the authors, all in habitats similar to those described above. Plants are common in each population but often highly local. *Poa alpina* and *P. rupicola* are common associates on both limestone and quartzite substrates. Populations found on quartzite substrates also are commonly accompanied by *Geum rossii* var. *turbidum*. Full flower by late Jul. Verified by A. Cronquist (*Henderson et al.* 4880), 1978.

Previous knowledge. Circumpolar but ranging s. in N.A. to s. B.C., n. WY, and nw. MT. (Herbaria consulted: CIC, ID, IDS, MONTU, NY, ORE, OSC, UTC, WS, WTU; published sources: Hitchcock et al., Vasc. pls. Pacific Northw. 5. 1955; Hitchcock and Cronquist, Fl. Pacific Northw. 1973; Dorn, Man. Vasc. pls. Wyo. 1977.)

Significance. First record for ID, an extension s. of 500 km. Although not in jeopardy, it is listed as Rare by the Tech. Comm. on Rare and Endangered Pls., Idaho Natural Areas Council.

HYMENOPAPPUS FILIFOLIUS Hook. var. IDAHOENSIS Turner (ASTERACEAE).—USA, ID: Custer Co., 12 km se. of Challis, Lost River Range, dry canyon bottom, Lime Cr. drainage, on volcanic ash, 2130 m, 18 Jun 1979, *Brunsfeld and Brunsfeld* 1010 (ID); Lemhi Co., steep w. slope on e. side Salmon R., 1.6 km ne. of mouth of McKim Cr. on volcanic ash, 1500 m, 14 Jun 1978, *Henderson et al.* 4446 (ID); Clark Co., dry, rocky soil near base of Reno Point, s. end Beaverhead Range on limestone, 1760 m, 9 Jul 1975, *Henderson and Jewell* 2608 (ID); Custer Co., dry, gravelly sw. slope above road along Challis Cr. at Challis N.F. boundary, 300 m e. of mouth of Pats Cr. on volcanic substrate, 1680 m, 13 Jun 1978, *Henderson et al.* 4413 (ID); Butte Co., Lost River Range, open ridge top, Bird Canyon Road 20 km e. of Mackay, on limestone, 2420 m, 1 Aug 1979, *Brunsfeld and Brunsfeld* 1301 (ID). Plants in each population generally abundant and associated with *Artemisia tridentata* and often with *Atriplex confertifolia*.

Previous knowledge. This var. known only from the Salmon and Lemhi valleys of Custer and Lemhi cos., ID; a well-marked endemic of e.-c. ID. (Herbaria consulted: ID, IDF, IDS, NY, ORE, OSC, UTC, WS, WTU; published sources: Hitchcock et al., Vasc. pls. Pacific Northw. 5. 1955; Hitchcock and Cronquist, Fl. Pacific Northw. 1973.)

Significance. These collections, 12 additional by the authors, and 16 by Andersen and Davies (ID), have established that this taxon is neither rare nor in jeopardy. Habitats in which the plants are most abundant are severely disturbed by grazing or other

factors. Current land use appears to favor this var. We consider its placement in the Federal Register (1975) as a proposed threatened taxon and similar status offered by Ayensu and Defilipps (Endang. threat pls. U.S. 1978) are unwarrantable.

CAREX RUPESTRIS All. (CYPERACEAE).—USA, ID, Lemhi Co., crest of Lemhi Range, Challis N.F.: dry alpine grassland on quartzite at head of Bruce Canyon, 3000 m, 30 Jun 1977, *Brunsfeld and Brunsfeld* 323 (ID, NY); dry rocky limestone outcrop 0.25 km s. of Trail Peak summit, 3200 m, 2 Jul 1977, *Brunsfeld and Brunsfeld* 375 (ID). Plants of both populations uncommon with *Poa rupicola*, *Trisetum spicatum*, *Carex elynoides*, and *Eritrichium nanum*. Verified by A. Cronquist (323), 1978.

Previous knowledge. Circumboreal but extending s. in USA in Rocky Mts. to the Uinta Mts. of UT. (Herbaria consulted: BOIS, BS, ID, IDF, MONTU, NY, ORE, OSC, WS, WTU; published sources: Hitchcock et al., Vasc. pls. Pacific Northw. 1. 1969; Hitchcock and Cronquist, Fl. Pacific Northw. 1973; Cronquist et al., Interm. fl. 6. 1977; Lackschewitz, Madroño 23:362. 1976.)

Significance. First records from ID. A w. extension in the USA of ca. 80 km. Although apparently in no jeopardy within ID, it is listed as Rare by the Tech. Comm. on Rare and Endangered Pls., Idaho Natural Areas Council.

ASTRAGALUS AMNIS-AMISSI Barneby (FABACEAE).—USA, ID: Butte Co.: base of limestone cliffs, Middle (Bartell) Canyon, sw. end of Lemhi Range, Challis N.F., 2040 m, 18 Jul 1978, *Henderson et al.* 4628 (ID); base of limestone cliffs, East Canyon, sw. end of Lemhi Range, Challis N.F., 1830 m, 5 Jun 1978, *Henderson et al.* 4211 (ID); Custer Co.: 6.4 km ne. of Mackay, Lost River Range, base of limestone cliffs, Lower Cedar Cr. Canyon, Challis N.F., 2160 m, 14 Jun 1979, *Brunsfeld and Brunsfeld* 956 (ID). Plants uncommon in all locations and nearly confined to stable limestone talus at base of cliffs or ledges and cracks above talus, often in partial shade of *Pseudotsuga menziesii* or *Cercocarpus ledifolius*. Associated closely with *Draba oreibata*. Flowers early to mid-June, fruits Jul. An earlier collection from the type locality (*Henderson* 3073, ID) was verified by C. L. Hitchcock.

Previous knowledge. Known only from the type locality, Pass Creek Gorge, Custer-Butte Co. line, Lost River Range. Recent examinations of this population by the authors disclose 30–40 readily-observable plants near the base of cliffs, and numerous additional plants on ledges and in cracks of the near-vertical limestone near the upper part of gorge. (Herbaria consulted: BOIS, BS, ID, IDF, MONTU, NY, ORE, OSC, WS, WTU; published sources: Hitchcock et al., Vasc. pls. Pacific Northw. 3. 1961; Hitchcock and Cronquist, Fl. Pacific Northw. 1973.)

Significance. Until 1978, considered one of Idaho's narrowest endemics. Included on the Federal list as Proposed Endangered (Federal Register, Jun 1976), and is listed as endangered by Ayensu and DeFilipps (op. cit). Collections cited above, 13 additional by the authors, and 3 by Andersen and Davies (all ID), each representing a substantial population in a different canyon in the Lost River and Lemhi ranges, establish the overall abundance of this taxon. There appear to be no immediate or proposed threats to this habitat, and the land managing agencies (USFS and BLM) have no plans for development within these areas. Although reproduction appears to be low, plants of all age classes are present in all populations examined. We believe there is no longer justification for consideration of this taxon as Endangered.

GENTIANA PROPINQUA Richards (GENTIANACEAE).—USA, ID, Custer Co., Lost River Range, Challis N.F., moist alpine meadows: n. slope Leatherman Pass on quartzite, 3120 m, 27 Jul 1979, *Henderson et al.* 5448 (ID); lake shore at head of e. Fk. Pahsimeroi River on limestone, 2900 m, 10 Aug 1979, *Brunsfeld and Brunsfeld* 1353 (ID, NY). Plants rare in both populations with *Deschampsia caespitosa*, *Poa alpina*, *Gentiana tenella*, *Carex elynoides*, and *Carex subnigricans*. Verified by staff at NY (*Brunsfeld and Brunsfeld* 1353), 1979.

Previous knowledge. Known from AK e. across Canada to Newfoundland and s.

in Rocky Mts. to Beaverhead Co., MT. (Herbaria consulted: BS, ID, IDF, MONTU, NY, ORE, OSC, WS, WTU; published sources: Hitchcock et al., Vasc. pls. Pac. Northw. 4. 1959; Hitchcock and Cronquist, Fl. Pacific Northw. 1973; Scroggan, Fl. Can. 4. 1978.) Synonym: *Gentianella propinqua* (Richards) Gillett.

Significance. First records for ID, an extension wsw. in USA of 300 km. Listed as Rare for ID by the Tech. Comm. on Rare and Endangered Pls., Idaho Natural Areas Council.

PAPAVER KLUANENSIS D. Löve (PAPAVERACEAE).—USA, ID, Lemhi Co., Lemhi Range, Challis N.F., summit of Bell Mt., 3740 m, Meadow Canyon Res. Nat. Area, 2 Aug 1978, *Henderson et al.* 4846 (ID, NY). Extremely rare. Population of 12–15 individuals from the summit to ca. 75 m down the n. and w. faces. No individuals were seen below this elevation or on other aspects. With *Arabis lemmonii* and *Draba lonchocarpa* in full sun among broken quartzite rocks at the summit, and with *Saxifraga debilis* and *Poa rupicola* in partial shade of near-vertical crevices on n. and w. faces. Only a few plants flowering on w. face, those of the summit and n. face still in bud. Verified by B. Ertter (NY), April, 1979.

Previous knowledge. Known from Yukon Terr. s. to NM, mainly along Continental Divide. Apparently restricted to high alpine summits and ridges. Not previously known from ID. (Herbaria consulted: ID, IDS, NY, ORE, OSC, UTC, WS, WTU; published sources: Löve, Brittonia 21:1–10. 1969; Dorn, Man. vasc. pls. Wyo. 1977; listed as *P. radicum* Rottb. in Rydberg, Fl. Rocky Mts. and adj. plains. 1922; Weber, Rocky Mt. fl. 1976; and Scroggan, Fl. Can. 3. 1978.) *Diagnostic characters.* Fls single, terminal, the petals yellow; fr with brown hairs; pls scapose and densely caespitose, lvs densely hairy; scapes erect at anthesis.

Significance. First record for the Pacific Northwest and for ID, a range extension w. of ca. 480 km. Concentrated floristic studies in this region over the past seven years failed to disclose any other populations. We consider this population to be endangered: although the Bell Mt. site is isolated, there is evidence of considerable foot traffic and the actions of a single, thoughtless individual could eliminate a significant portion of this small population. Listed as endangered for ID by the Tech. Comm. on Rare and Endangered Pls., Idaho Natural Areas Council.

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ANNOUNCEMENT

CALIFORNIA BOTANICAL SOCIETY—GRADUATE STUDENT MEETINGS

The California Botanical Society Graduate Student Meetings will be held at San Francisco State Univ., 24–25 October 1981. The meeting will focus on the presentation of short research papers and reports in progress by graduate students in all botanical and plant related fields. Members and non-members are invited to participate. For further information please contact the Graduate Student Meetings Committee, Dept. of Biology, San Francisco State Univ., San Francisco 94132 or leave a message at (415) 469-1359.

Dr. Harry D. Thiers will present a seminar Saturday evening on his recent work in Australia and the interesting fungal flora of that area.